

**In re the Application of GREIG REID BREBNER**  
**Application No. 10/579,656**  
**International Application No. PCT/NZ2004/000292**  
**Docket No. 0074-542855**

**REMARKS**

In view of the amendments presented herewith and the following remarks, favorable reconsideration and allowance of this application are respectfully requested.

At the outset, it is noted that claim 1 has been cancelled, and the claims which depended from claim 1, either directly or indirectly, now depend from claim 67. Furthermore, it is noted that new claims 71 – 73 have been added. No new matter is added by any of the amendments.

In the November 25, 2009, Final Action the Examiner rejected claims 68 – 70 under 35 U.S.C. § 112, second paragraph, as being allegedly indefinite for failing to particularly point out and distinctly claim the subject matter which the Applicant regards as the invention. Specifically, the Examiner stated that it is unclear whether the first or second member is pivotally connected to the shaft in claim 68.

Claims 1 – 9, 22 and 67 are rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Kida et al. (US Patent No. 4,474,201; hereinafter "Kida") in view of Chang et al. (US Patent No. 5,694,958; hereinafter "Chang").

Claim 10 is rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Kida in view of Chang as applied to claim 6 and further in view of Siers et al. (US Patent No. 2,047,711; hereinafter "Siers").

Claim 11 is rejected under 35 U.S.C. § 103(a) as being allegedly unpatentable over Kida in view of Chang as applied to claim 6 and further in view of Wiens et al. (US Patent No. 4,716,260; hereinafter "Wiens").

These rejections constitute all of the grounds set forth in the November 25, 2009 Final Action for refusing the present application. For the reasons given below, it is respectfully submitted that these rejections should be withdrawn.

The examiner indicated that claims 23-39, 31-47, and 50-64 are allowed. The examiner also indicated that claims 12-21 would be allowable if amended to include all of the features from which those claims depend, claims 1 and 6. The examiner further indicated that claims 68-70 would be allowable if claim 68 is amended to overcome the rejection under 35 USC 112, second paragraph.

**I. 35 U.S.C. § 112, Second Paragraph, rejection of claims 68 – 70.**

In making this rejection the Examiner states that claim 68 recites “a first member slidable relative to a second member pivotally connected to the shaft”. The Examiner believes that this renders the claim indefinite because “It is unclear whether the first member is pivotally connected to the shaft or the second member is pivotally connected to the shaft”. The Applicant has amended claim 68 to make it clear that the second member is pivotally connected to the shaft. Accordingly, claims 68 to 70 are now in allowable form.

**II. 35 U.S.C. § 103(a) rejections of claims 1 – 9, 22 and 67 over Kida in view of Chang.**

**A. Claims 67, 2 – 6, and 9:**

In making this rejection the Examiner asserted that it would have been obvious to one of ordinary skill in the art to modify the umbrella described in Kida to include a deployable force spreader that fits into a pocket in the umbrella canopy, as taught by Chang, so that the canopy does not tear from the pressure exerted on it when the umbrella is opened.

More specifically, the Examiner states that Kida discloses an umbrella comprising a shaft, a plurality of rib members, first ends of said rib members spaced about and pivotally connected at or adjacent to first end of said shaft, a canopy, a sliding means movable along the

shaft to erect or collapse the umbrella, a plurality of struts, each of which is pivotally connected between the sliding means and a rib member. The Examiner states that Kida further teaches a secondary sliding means movable along the shaft between the primary sliding means and the first end of the shaft and a plurality of secondary struts, each secondary strut to be connected to a primary strut a predetermined distance from its connection with said primary sliding means, wherein said predetermined distance is substantially equal to the length of said secondary strut. The Examiner acknowledges that Kida lacks pockets in the canopy and a deployable force spreading means.

The Examiner next states that Chang teaches an umbrella having a plurality of ribs wherein each rib has a deployable force spreader attached thereto comprising a bearing surface and that the deployable force spreaders fit into a corresponding plurality of pockets located along the periphery of canopy. The Examiner concluded that it would have been obvious to one having ordinary skill in the art to modify the umbrella described in Kida to include a deployable force spreaders that fit into pockets in the canopy, as taught by Chang, so that the canopy would not tear under pressure applied by the end of each rib member.

Claim 67 as now presented recites that the force spreader comprises "first and second legs pivotally connected to a pivot" and that "the force spreader is deployable from a collapsed state wherein the legs of the force spreader in a compressed state the pocket to an expanded state wherein the legs of the force spreader are splayed about the pivot at or near the periphery of the canopy, the splayed legs forming a load bearing edge against the periphery of the canopy within the pocket to tension the canopy upon reconfiguring the umbrella from a collapsed state to an open state ... "

The proposed combination of Kida with Chang does not render the applicant's claimed umbrella as set forth in claim 67 unpatentable under Section 103(a). Chang shows a rigid T-cap that does not have legs that deploy from a compressed state to an expanded state, as called for in

the applicant's claimed umbrella. Following from this, the T-cap used in the Chang umbrella cannot enable the action of tensioning the canopy upon reconfiguring the umbrella from a collapsed state to an open state. The T-cap used in the Chang umbrella can only provide the same degree of tension in the canopy in both umbrella states (collapsed and open). Moreover, the T-cap used in the Chang umbrella cannot actually tension the canopy except in the vicinity of the rib.

In contrast, in the applicant's claimed umbrella, the splaying of the legs of the force spreader enables the tensioning of the canopy, and distinguishes the applicant's claimed umbrella from the umbrellas described and shown in Chang and Kida. The splaying of the legs provides "give" and tolerance, such that they adapt to splay to the required amount to provide the required amount of tension as the umbrella reconfigures between the opened and closed conditions. The rigid T-cap used in the Chang umbrella cannot provide the same functionality because to enable the umbrella described in Chang to open, there must be at least some lack of tension in both states. It is not possible to have an umbrella with a rigid T-cap that is tensioned in both open and collapsed states, and can also reconfigure between the states. There must be some tolerance in the tensioning process to enable the transition of states. In summary, the proposed combination of Chang and Kida does not provide an umbrella having all the features of the applicant's claimed umbrella as set forth in claim 67. Moreover, it is readily apparent that an umbrella utilizing the rigid T-cap described in Chang would be quite bulky in the closed condition because the T-caps would inhibit full closure of the canopy. For all of the foregoing reasons, it is believed that the applicant's claimed umbrella as set forth in claim 67 is both novel and nonobvious.

Claims 2 – 6, and 9 depend from claim 67 either directly or indirectly and thus, include all of the features of claim 67. Therefore, claims 2 – 6, and 9 are allowable over the cited references for at least the same reasons as claim 67.

**B. Claims 7 and 8:**

In explaining the rejection of claims 7 and 8 the Examiner concluded that it would have been obvious to one of ordinary skill to modify Kida so that the secondary struts were half the length of the struts, or 15/26 times the length of the struts, because a change in proportion involves only routine skill in the art. The examiner cites *In re Reese*, 129 USPQ 402, in support of that contention.

Claims 7 and 8 depend indirectly from claim 67, and thus, include all of the features of claim 67. Therefore, claims 7 and 8 are allowable for at least the same reasons as claim 67.

**C. Claim 22:**

In explaining the rejection of claim 22, the Examiner concedes that Kida does not disclose an umbrella with more than six rib members. However, the Examiner concludes that it would have been obvious to only have six rib members "since [an umbrella] is common and old and well known to have six rib members, and one of ordinary skill would know that changing the number of rib members would be an obvious variation that would still prove effective."

Claim 22 depends indirectly from claim 67, and thus, includes all of the features of claim 67. Therefore, claim 22 is allowable over the proposed combination of Kida and Chang for at least the same reasons as claim 67.

For all of the foregoing reasons the rejections of claims 2-9, 22, and 67 under 35 U.S.C. § 103(a) should be withdrawn.

**III. 35 U.S.C. § 103(a) rejection of claim 10 over Kida in view of Chang, and further in view of Siers.**

In explaining the rejection of claim 10, the Examiner asserts that although the proposed combination of Kida and Chang would have a spacing means that separates the sliding means when the umbrella is in the fully deployed position, the spacing means would be attached to the secondary sliding means. The examiner then asserts that Siers teaches an umbrella having a sliding means and a secondary means for attaching secondary struts, wherein the sliding means has a spacing means that restricts the upward movement of the sliding means. The Examiner concluded, "it would have been obvious to one of ordinary skill to modify Kida and Chang to have the spacing means attached to the sliding means, as taught by Siers, because it is an obvious variation that would not have any effect on the functionality of the umbrella."

Claim 10 depends indirectly from claim 67 and thus, includes all of the features of claim 67. As discussed in Section II.A. above, the proposed combination of Kida and Chang does not describe or suggest all of the features of the applicant's claimed umbrella as now set forth in claim 67. Siers does not describe or suggest the novel features of the applicant's claimed umbrella that are missing from Kida and Chang. Therefore, claim 10 is allowable over the proposed combination of Kida, Chang, and Siers for at least the same reasons discussed in Section II.A. relative to claim 67. Accordingly, the rejection of claim 10 under 35 U.S.C. § 103(a) should be withdrawn.

**IV. 35 U.S.C. § 103(a) rejection of claim 11 over Kida in view of Chang, and further in view of Wiens.**

In explaining the rejection of claim 11, the Examiner concedes that the proposed combination of Kida and Chang would not have a holding means. However the Examiner asserts that Wiens discloses "an umbrella having a sliding means (26) in a holding means (59) that holds the sliding means in place and acts as a bias." The Examiner concluded that it "would have been

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obvious to one of ordinary skill to modify Kida and Chang to include a holding means, as suggested by Wiens et al., so to provide a bias to stop movement of the sliding means.”

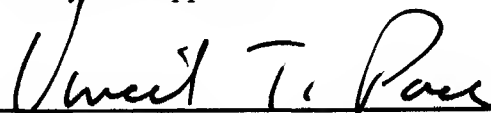
Claim 11 depends indirectly from claim 67 and thus, includes all of the features of claim 67. As discussed in Section II.A. above, the proposed combination of Kida and Chang does not describe or suggest all of the features of the applicant’s claimed umbrella as now set forth in claim 67. Wiens does not describe or suggest the novel features of the applicant’s claimed umbrella that are missing from Kida and Chang. Therefore, claim 11 is allowable over the proposed combination of Kida, Chang, and Wiens for at least the same reasons discussed in Section II.A. relative to claim 67. Accordingly, the rejection of claim 11 under 35 U.S.C. § 103(a) should be withdrawn.

#### CONCLUSION

In view for the foregoing amendments and remarks, it is believed that the claims currently pending in this application are in condition for allowance. The Applicant respectfully requests that the Examiner reconsider the application in the light of the amendments and remarks presented herein. Early and favorable action on the present application is earnestly solicited.

Respectfully submitted,

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